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I, LEANNE MYNOTT, MANAGER EXAMINATION SUPPORT AND SALES hereby certify that annexed is a true copy of the Provisional specification in connection with Application No. 2004901015 for a patent by ORDATRONICS PTY LTD as filed on 01 March 2004.

WITNESS my hand this
Tenth day of March 2005

A handwritten signature in black ink, appearing to read 'LM'.

LEANNE MYNOTT
MANAGER EXAMINATION SUPPORT
AND SALES



A U S T R A L I A

Patents Act 1990

PROVISIONAL SPECIFICATION

for the invention entitled:

"Interactive terminal with advertising screen"

The invention is described in the following statement:

INTERACTIVE TERMINAL WITH ADVERTISING SCREEN

BACKGROUND TO THE INVENTION

This invention relates to advertising processes at an interactive terminal used by

5 customers at a retail outlet, in particular but not only to terminals used at food outlets.

Interactive touch screen systems aim to provide customer self-servicing roles in industries such as tourism, government services, hospitality and health care. The

kiosks or terminals typically used in these systems can be separated into three main component categories: the housing, the computer hardware and the computer

10 software. The housing has two principle functions, firstly to provide a physical body in which the hardware is embedded, and secondly, to be appealing in design so as to attract potential customers. The hardware coupled with the software is the medium by which customers interact with the technology to select their desired choices from the range of services offered by the kiosk.

15 The majority of interactive terminals that function at the point of sale (POS) typically use only one touch screen monitor and incorporate both the customer self-service application, as well as any advertising on the same monitor. The purpose of advertising is to promote and influence customer choices during use of the terminal. Currently the management of these dual roles is achieved by the kiosk activating its 20 customer self-serving role when in use at the POS, and then switching to its media-advertising role during periods of non-activity. The primary disadvantage with this type of kiosk dual role operation is that only one role can be functional at a given instance.

SUMMARY OF THE INVENTION

25 It is an object of the invention to provide improvements in advertising processes at interactive terminals, or at least to provide an alternative to existing systems. In general terms the invention involves a separation of the systems used to allow interaction by a customer and the systems used to provide advertising to the customer, but nevertheless to provide an integrated terminal.

30 In one aspect the invention may broadly be said to consist in an order preparation terminal, having: an interactive display for selection of menu items by a customer, an

advertising display for presentation of advertising information to the customer, a first subsystem which operates the interactive display and tracks menu items as selected by the customer, and a second subsystem which operates the advertising display and receives selection information from the first subsystem, wherein the second

5 subsystem varies the display of advertising information in accord with the information received from the first subsystem.

Preferably the interactive display and the advertising display are provided on separate screens, and the interactive display is a touchscreen. The interactive display and the advertising display may also be provided on a common screen.

10 In one embodiment the first subsystem includes a database of predetermined menu displays and predetermined sequences for presenting the menu displays. The second subsystem includes a database of predetermined advertising information and predetermined sequences for presenting the advertising information. The second subsystem operates the advertising display to present background advertising information in the absence of information from the first subsystem.

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Control of the terminal's functionality, including usage, control, diagnostics, inventory, and marketing data capture can be implemented locally or by remote connection to a network.

20 In another aspect the invention may broadly be said to consist in a method of interacting with a customer at an outlet for goods or services, including: displaying menu information at a customer operated terminal, displaying advertising information at the terminal simultaneously with the menu information, receiving a selection by the customer of one or more items from the menu information, and varying the advertising information in accord with the selection of items.

25 Preferably the method further includes tracking a sequence of menu selections made by the customer and varying the advertising information in accord with each selection. Preferably also displaying background advertising information in the absence of a customer selection for a predetermined period. The variation in advertising information is determined by the content of successive displays of menu information following selections by the customer.

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Preferably the menu and the advertising information are displayed on separate screens in the terminal, although the menu and the advertising information are displayed on a common screen in the terminal.

The menu items are generally related to food or drink and the advertising information corresponds to items of food or drink. The advertising information may also correspond to products that are of interest to the demographics of customers using the terminal

LIST OF FIGURES

Preferred embodiments of the invention will be described with respect to the accompanying drawings, of which:

Figure 1 shows the housing of a prototype terminal having separate screens for customer interaction and media advertising.

Figure 2 is a block diagram showing the main hardware components of an interactive terminal such as shown in Figure 1,

Figures 3a and 3b are schematic diagrams showing the layout and overall operation of a terminal having separate screens for interaction and advertising,

Figure 4a and 4b outline operation of the terminal in more detail and indicate a sequence of customer interaction with corresponding advertising, and

Figures 5a, 5b and 5c outline how data for the terminal may be created and installed.

DESCRIPTION OF PREFERRED EMBODIMENTS

Referring to the drawings it will be appreciated that the invention can be implemented in various ways for a variety of purposes. The embodiments described here are given by way of example only.

Figure 1 shows a prototype terminal in the form of a self service kiosk having a touch screen for use by customers and a separate media screen for advertising. The screens are also generally called monitors in this specification. It might be used in a range of retail outlets such as fast food stores. Different arrangements and perhaps a single combined screen could alternatively be provided. In this example one screen is an interactive touch-screen dedicated as an interface for customer interaction, and

possessing its own software to control and monitor the ordering/selection process. The other is used to broadcast media-advertising and also has its own dedicated software to control when, what and how long each advertisement is to be aired. The display of the media broadcasting content is controlled through the uploading of information 5 through local means such as CD drives, DVD drives, flash drives or remote means via network connections such as wireless technologies (eg. wireless LANs, GPRS, satellite) or wired technologies (eg. ISDN, ADSL, cable, dialup).

The system enables communication between its media-broadcasting and interactive software components, allowing the media-advertising software to sense up-coming 10 customer selection choices and to display advertising material directly related to the choices that are going to be made. For example, the customer may be required to choose between product A, product B and product C. Prior to selection, the media-broadcasting senses the possible up-coming choices and displays an advertisement promoting product B, for instance, so as to attempt to influence customer preference 15 for this product.

Figure 2 is a block diagram showing the main electronic components of a typical terminal. The components include a microprocessor and memory with connections to a range of peripheral devices. In this case the peripherals include two video monitors, one with a touch screen and the other an ordinary display screen. A bar code reader, a 20 printer, and a hard drive are also included. A database of available items and related information such as a screen logo and price is stored on the hard drive. The information may be updated in a range of ways, including a wired or wireless network connections, data accepted via a portable mass storage device such as a Universal Serial Bus (USB) flash device, a remote computer (potentially anywhere in the world) 25 utilizing a internet connection to enable communications. The configuration can be changed by staff members by entering a 'maintenance' mode on the customer terminal.

Figures 3a and 3b broadly show the twin screen arrangement and software for 30 controlling the arrangement. Monitors 1 and 2 are arranged in physically convenient orientations, controlled by respective software programs 1 and 2. Monitor 1 includes a touchscreen component controlled by a respective driver.

Figures 4a and 4b outline how the terminal operates when interacting with a customer. During periods of inactivity, the interactive touch-screen monitor is in a track mode, displaying store related information to prompt a customer in activating the interactive software. The media-broadcasting software operating on the second monitor continues 5 to display media-broadcasting information. In this example, the media-broadcasting displayed on the secondary monitor falls under three types of categories, which are, (1) a "How to Order" multi-media advertisement to attract customers with the system, (2) multi-media advertisements related to products and services offered by the system and (3) multi-media advertisements not related to products and services that are 10 actually offered.

Figures 5a, 5b and 5c indicate how data for the interactive and advertising aspects of the terminal may be created, installed and updated. The flow diagrams are generally self explanatory and need not be explained in detail.

Periodically, media-broadcasting files are distributed out to each outlet having an 15 interactive terminal so that the media content can be updated. This distribution may take the form of mailing, whereby the information is manually uploaded via a CD or DVD drive. A store manager is given instructions on the changing of the CD of the terminal. They are required to open a rear door of the terminal to access a CD drive. They place the new CD into the drive and the terminal will automatically install the 20 media-broadcasting material. Once complete, the CD is removed from the CD drive. Other terminals on the premises are updated in the same way with the same CD. It is also possible to transfer media-broadcasting content via the uploading of information by remote means via network connections such as wireless technologies (eg. wireless LANs, GPRS, satellite) or wired technologies (eg. ISDN, ADSL, cable, dialup).

25 The media-broadcasting video format used on terminals is preferably highly compressed video. This maximises the number of videos that can be placed on the CDs for deployment. The video is scheduled on the appropriate CDs according to what the advertiser has purchased. Often multiple slots are purchased for each terminal to maximise impact. Multiple slot purchases that have the same video material will be uploaded into the terminal schedule at random but with the proviso 30 that they are not back to back.

The process in which media-broadcasting material is created is as follows:

1. The advertisers' video is compressed into a suitable format for the IST
2. Compressed video is added to the appropriate schedule based on what the advertiser has purchased. This includes the number of slots and which types of outlets purchased. The new schedule is generated along with any other new advertisers.
3. New CDs are created and the serial numbers of these CDs are numbered appropriately.
4. The new CDs are distributed out to the appropriate outlets. Different CDs are created for different outlets to allow advertisers to select which outlet they would like to advertise on..
5. The store manager receives the new CD and inserts it via the rear door of the IST. The CD automatically starts up and checks to see if the version of the media software on the CD is newer than what it has locally. If it is newer then it installs the new media software including all the new advertisements.
6. Follow up calls are made to each premises to confirm that the new media software has been installed. If the current store manager is unsure, then a visual check of a red number at the lower left hand corner of the top screen can be quickly made. If this number is the old version, then the new CD needs to be inserted as mentioned previously.

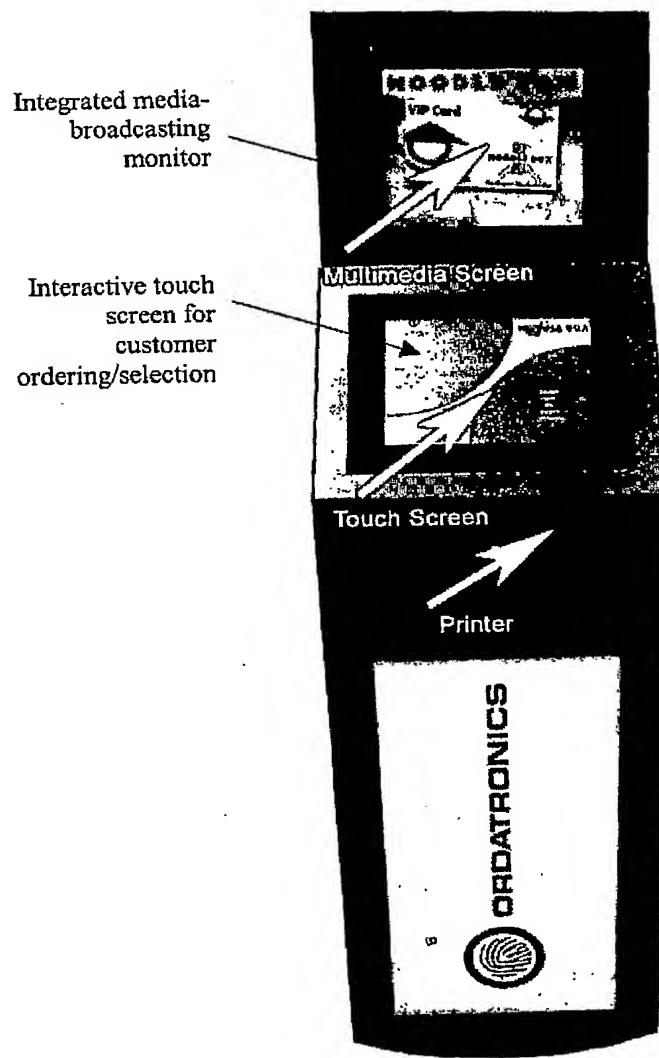


Figure 1

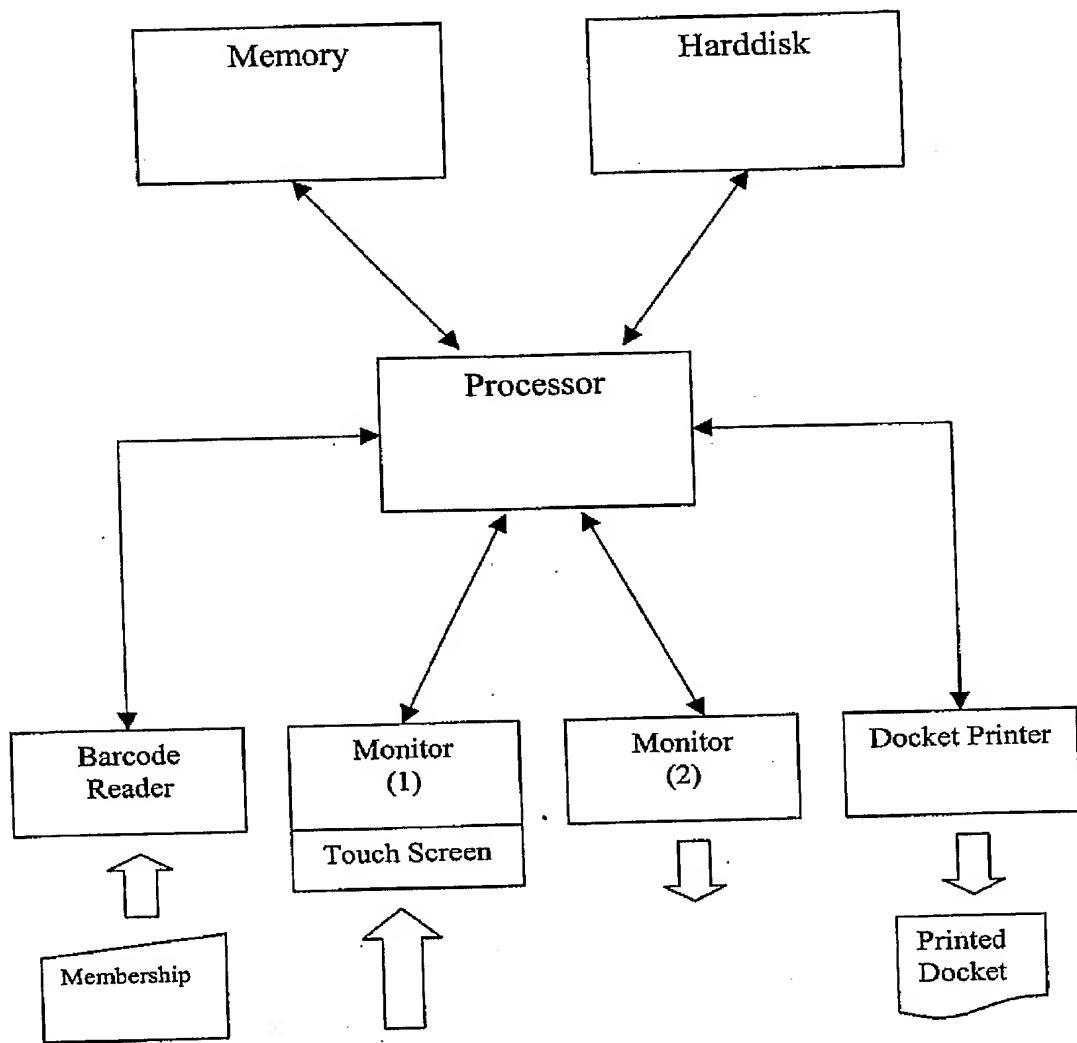


Figure 2

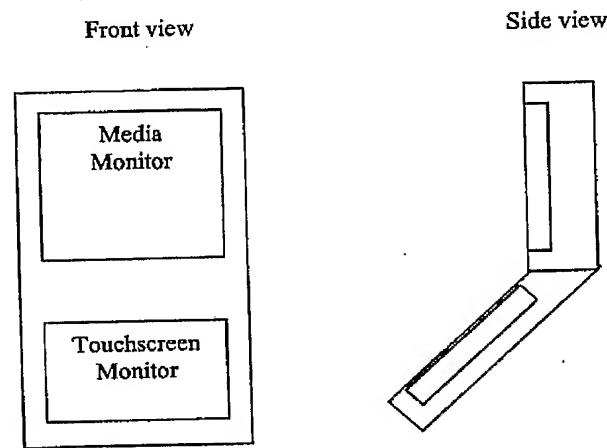


Figure 3a

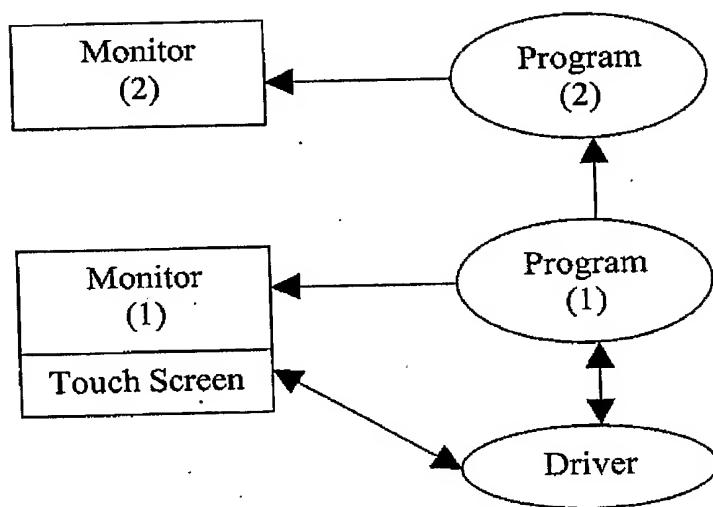


Figure 3b

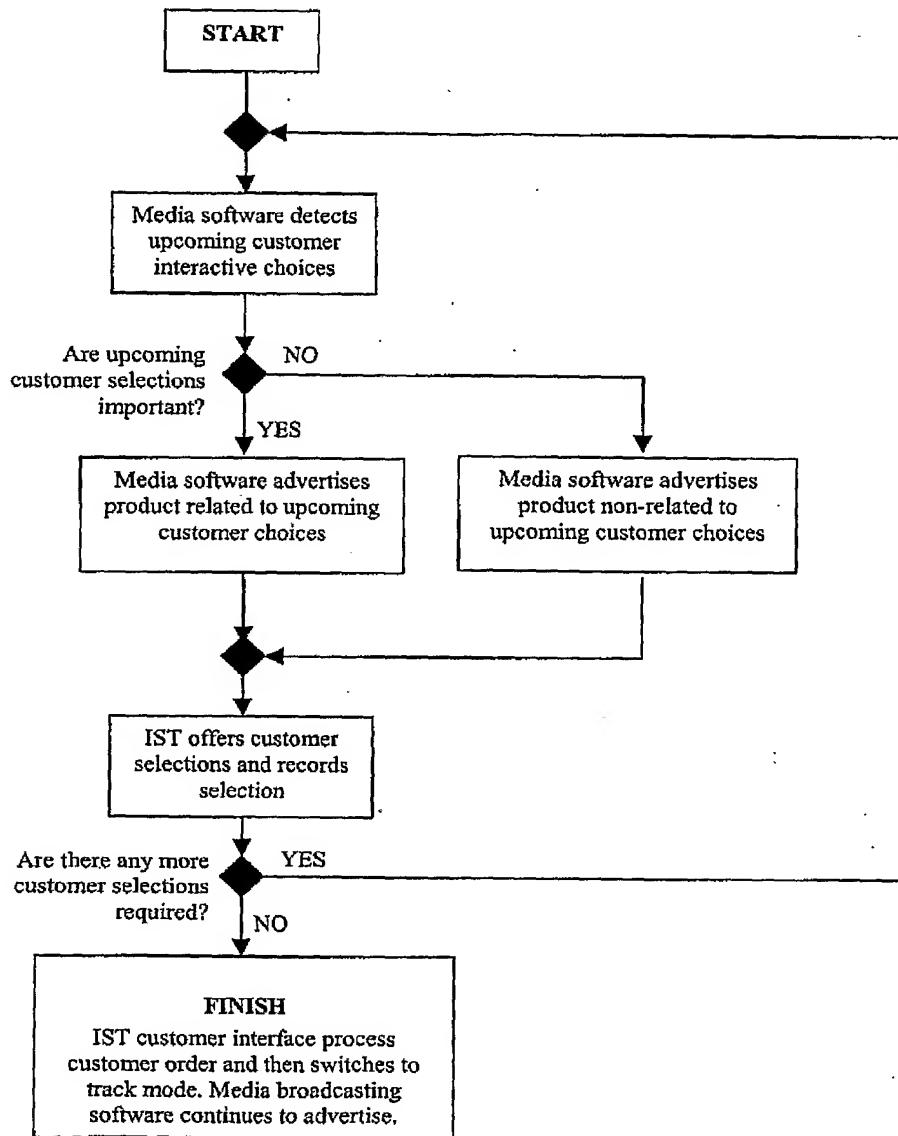


Figure 4a

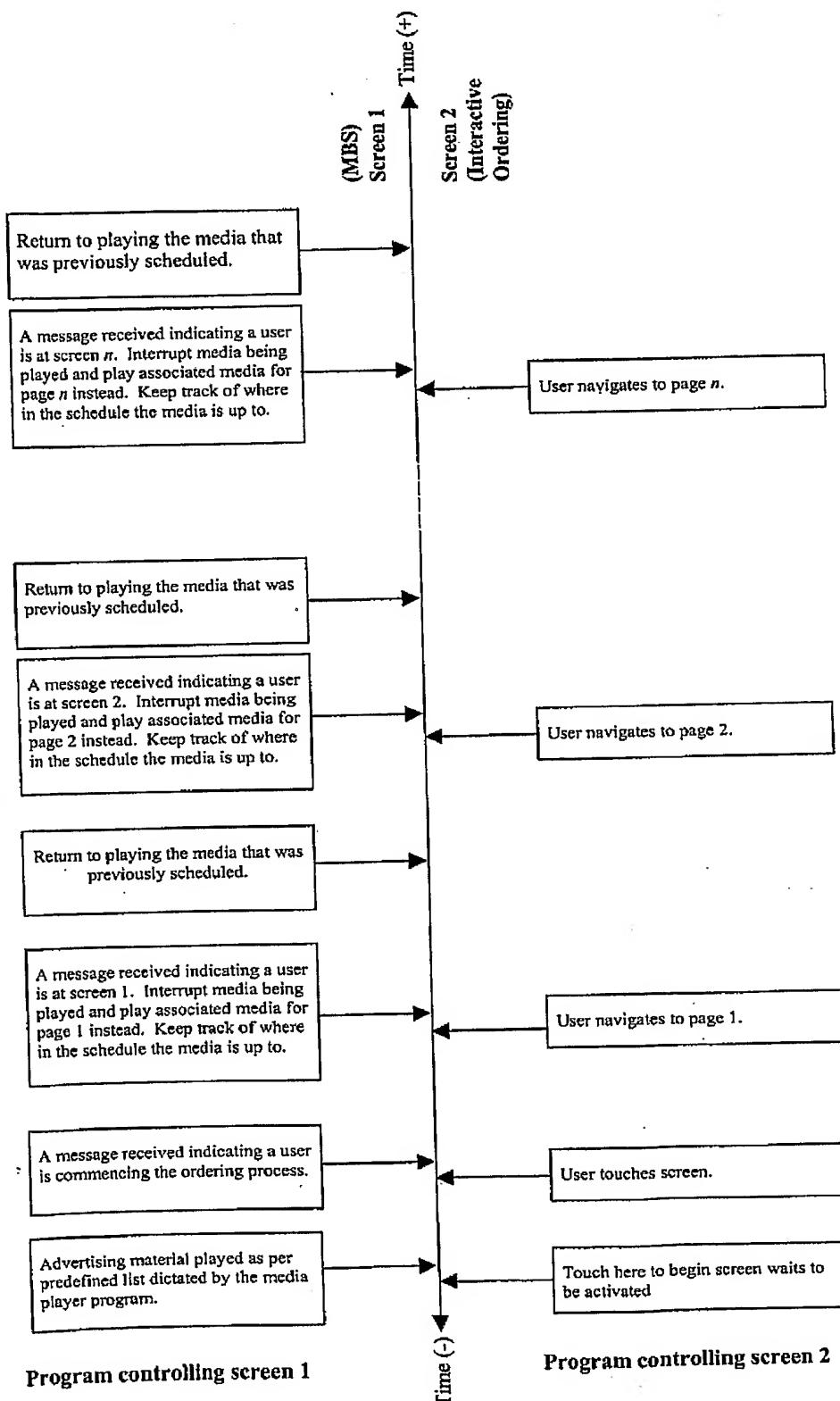


Figure 4b

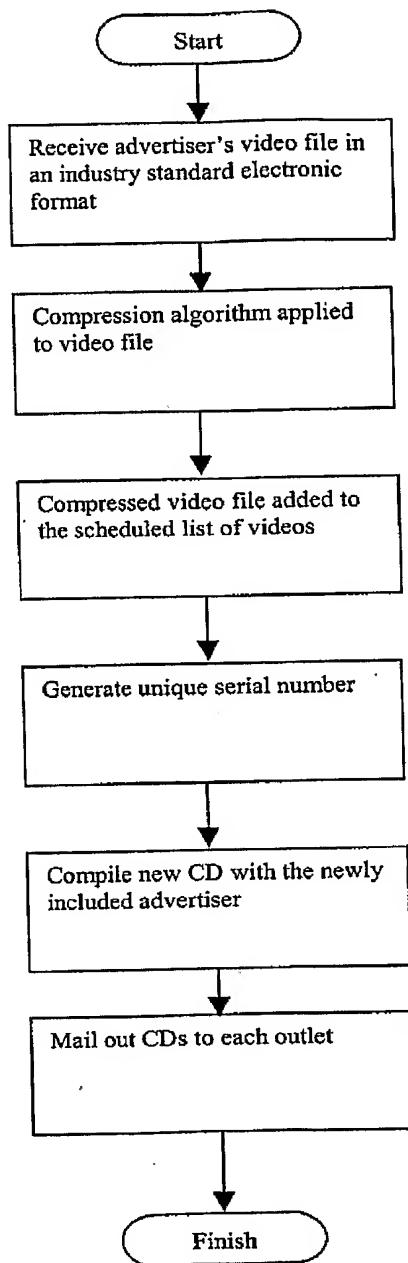


Figure 5

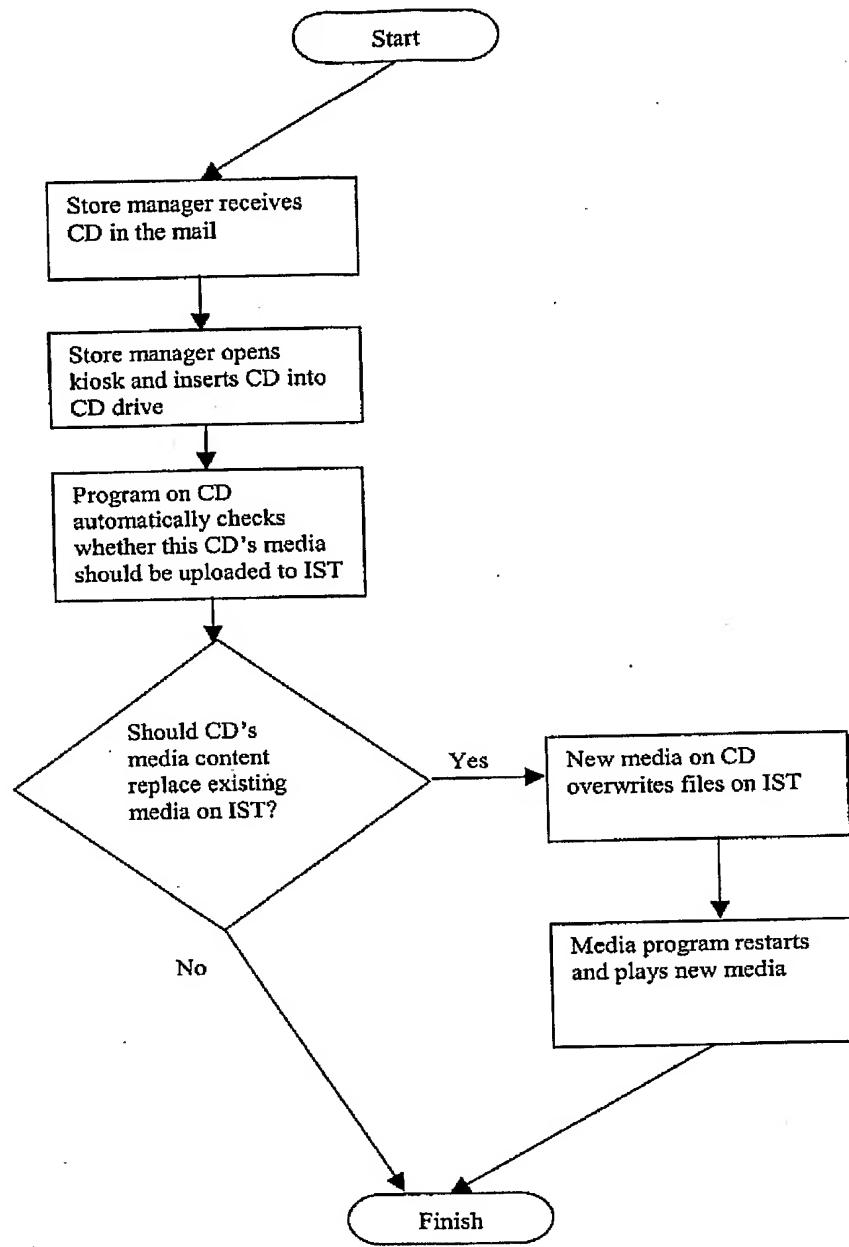


Figure 6

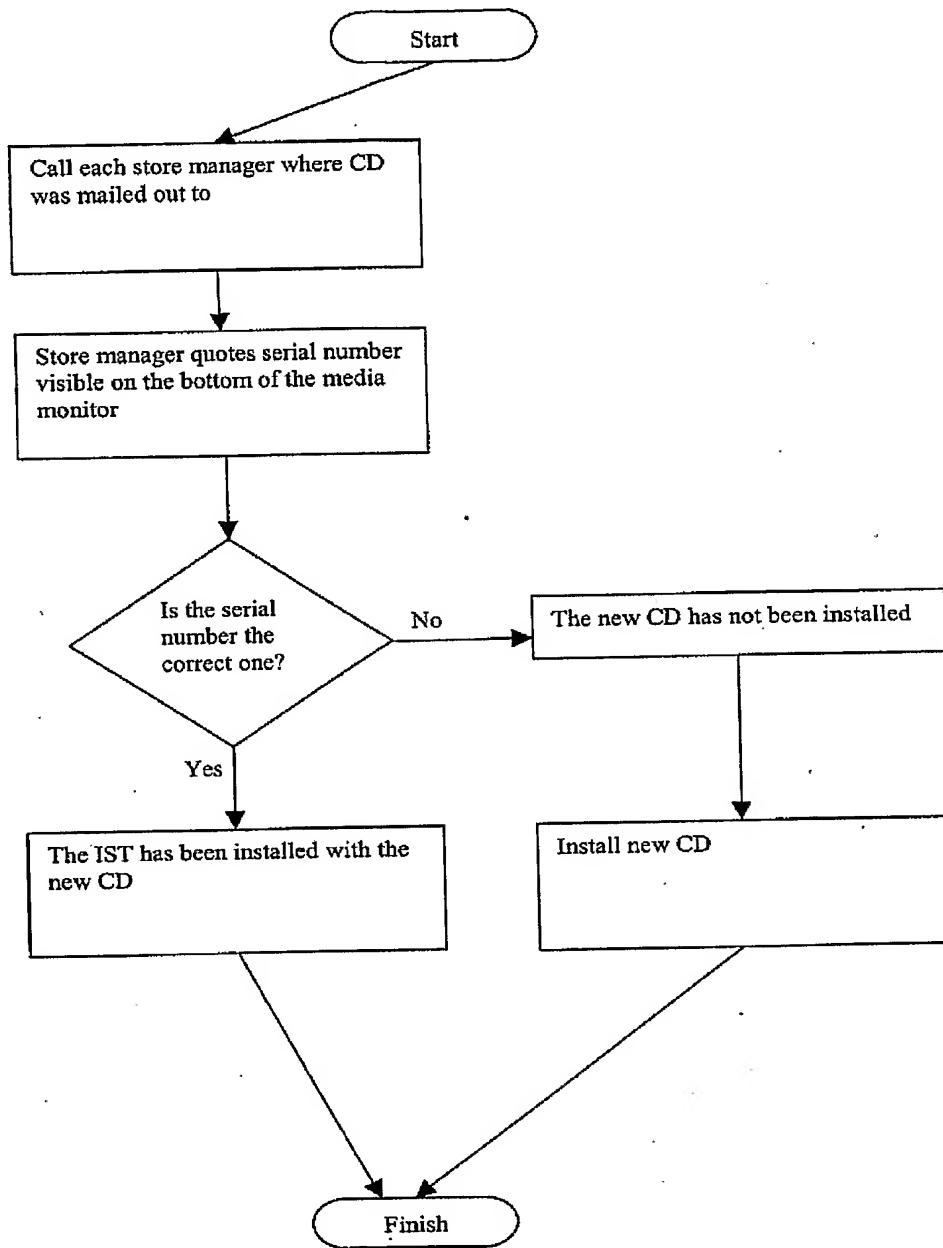


Figure 7